

Claims

1. A support program for a web application server, said support program adapted for making a controller for the web application server execute processings (1) to (6) recited below, said controller being adapted to send web information to a client by using a communication unit, receive reply information with respect to said web information from said client via the communication unit, store the reply information into a storage unit and execute, according to processing steps of a series of said processings stored in said storage unit, processings based on said reply information:
- (1) information-adding processing for adding client-specifying information to specify said client and web-specifying information to specify said web information to the web information;
- (2) information-sending processing for sending said web information to which said client-specifying information and said web-specifying information are added to said client in a specified one of said processing steps by using said communication unit;
- (3) information-storing processing for storing said client-specifying information and said web-specifying information which are added to said web information and processing information related to said specified processing step at the time when said web information is sent to said client, into said storage unit every time said web information is sent to said client;
- (4) information-receiving processing for receiving the reply information returned from said client via said communication unit;
- (5) reply information-detecting processing for detecting whether or

not the client-specifying information and the web-specifying information are included in the received reply information; and

(6) service-executing processing for obtaining a processing step subsequent to the processing step determined based on said

5 processing information stored in said storage unit from said storage unit and executing the subsequent processing step when the client-specifying information and the web-specifying information are detected from said reply information and said detected client-specifying information and said web-specifying information are identical with said client-specifying information and said
10 web-specifying information stored in said storage unit, respectively, and for executing the processing step determined based on said processing information stored in said storage unit again when the client-specifying information and the web-specifying information are detected from said reply information and said detected
15 client-specifying information is identical with said client-specifying information stored in said storage unit but said web-specifying information detected from said reply information is different from said web-specifying information stored in said storage unit.

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2. The support program for the web application server according to claim 1, characterized in that said storage unit comprises a data-declaration part to be used in said series of the processings as work areas for respective setting items of member variables and a
25 data-storage part for storing data included in said reply information in said series of the processings for the respective setting items,

and said support program for the web application server have

said controller:

discriminate, when a data entry form for having said client to input the data is included in said web information, a kind of a setting item of the input data to be inputted in said data entry form by said data-declaration part and store the kind of the setting item of the input data into said storage unit together with said client-specifying information, said web-specifying information and said processing information in said information-storing processing at the time when the web information is sent to said client; and

store, when the client-specifying information and the web-specifying information detected from said reply information are identical with said client-specifying information and said web-specifying information stored in said storage unit, respectively, and the kind of the setting item of the input data detected from said reply information is identical with the kind of setting item of the input data stored in said storage unit, said detected input data into said data-storage part for the respective setting items in said service-executing processing.

3. The support program for the web application server according to claim 2, characterized in that, when a plurality of said data entry forms are included in said web information and when the kinds of the setting item of the input data to be inputted according to said data entry form overlap, said support program for the web application server have said controller:

execute identifier-adding processing for adding an identifier for carrying out identification of the input data in which the kinds of the

setting item overlap to every said data entry form and including the data entry forms in said web information, and at the same time, associate the kinds of the setting item of the input data inputted by said data entry forms with said identifiers and store the kinds of the setting item into said storage unit in said information-storing processing; and

discriminate, when the kinds of the setting item of said input data detected from said reply information and the kinds of the setting item stored in said storage unit correspond at every identical identifier, the setting items of said detected input data based on the identifiers stored in said storage unit and store them into said data-storage part for the respective setting items in said service-executing processing.

4. The support program for the web application server according to claim 1, characterized in that a parallel processing is implemented in said web application server by:

saving information necessary to carry out said information-receiving processing in said storage unit to have said controller to execute other processing after said information-storing processing; and

restoring said saved information to have said controller to resume said reply information-detecting processing when receiving said reply information in said information-receiving processing.

5. A support program for a web application server, said support program adapted for making a controller for the web application

server execute processings (1) to (6) recited below, said controller being adapted to send web information in which a data entry form for having a client to input data is included to said client by using a communication unit, receive the input data inputted according to
5 said data entry form from said client as reply information via the communication unit, and store said input data into a storage unit comprising a data-declaration part used as work areas for respective setting items of member variables and a data-storage part for storing the data included in said reply information for the respective setting
10 items:

- (1) information-adding processing for adding the data entry form for having said client to input the data to the web information;
- (2) information-sending processing for sending said web information to which said data entry form is added to said client by using said
15 communication unit;
- (3) information-storing processing for discriminating a kind of a setting item of the input data to be inputted in said data entry form by said data-declaration part stored in said storage unit and storing the kind of the setting item of the input data into said storage unit
20 every time said web information is sent to said client;
- (4) information-receiving processing for receiving the reply information returned from said client via said communication unit;
- (5) reply information-detecting processing for detecting whether or not said input data is included in the received reply information; and
25 (6) service-executing processing for, when said input data is detected from said reply information and the kind of the setting item of the detected input data and the kind of the setting item stored in

said storage unit are identical, storing said detected input data into said data-storage part for the respective setting items.

6. The support program for the web application server according to claim 5, characterized in that, when a plurality of said data entry forms are included in said web information and when the kinds of the setting item of the input data to be inputted according to said data entry form overlap, said support program for the web application server have said controller:

execute identifier-adding processing for adding an identifier for carrying out identification of the input data in which the kinds of the setting item overlap to every said data entry form and including the data entry forms in said web information, and at the same time, associate the kinds of the setting item of the input data inputted by said data entry forms with said identifiers and store the kinds of the setting item into said storage unit in said information-storing processing; and

discriminate, when the kinds of the setting item of said input data detected from said reply information and the kinds of the setting item stored in said storage unit correspond at every identical identifier, the setting items of said detected input data based on the identifiers stored in said storage unit and store them into said data-storage part for the respective setting items in said service-executing processing.

7. The support program for the web application server according to claim 5, characterized in that a parallel processing is implemented in

said web application server by:

5 saving information necessary to carry out said
information-receiving processing in said storage unit to have said
controller to execute other processing after said information-storing
processing; and

 restoring said saved information to have said controller to
resume said reply information-detecting processing when receiving
said reply information in said information-receiving processing.

10 8. A server in which a controller sends web information to a client
by using a communication unit, receives reply information with
respect to said web information from said client via the
communication unit, stores the reply information into a storage unit
and executes processings based on said reply information according
15 to processing steps of a series of said processings stored in said
storage unit, characterized in that said controller executes:

 information-adding processing for adding client-specifying
information to specify said client and web-specifying information to
specify said web information to the web information;

20 information-sending processing for sending said web
information to which said client-specifying information and said
web-specifying information are added to said client in a specified one
of said processing steps by using said communication unit;

 information-storing processing for storing said client-specifying
25 information and said web-specifying information which are added to
said web information and processing information related to said
specified processing step at the time when said web information is

sent to said client, into said storage unit every time said web information is sent to said client;

information-receiving processing for receiving the reply information returned from said client via said communication unit;

5 reply information-detecting processing for detecting whether or not the client-specifying information and the web-specifying information are included in the received reply information; and

service-executing processing for obtaining a processing step subsequent to the processing step determined based on said processing information stored in said storage unit from said storage unit and executing the subsequent processing step when the client-specifying information and the web-specifying information are detected from said reply information and said detected client-specifying information and said web-specifying information are identical with said client-specifying information and said web-specifying information stored in said storage unit, respectively, and for executing the processing step determined based on said processing information stored in said storage unit again when the client-specifying information and the web-specifying information are detected from said reply information and said detected client-specifying information is identical with said client-specifying information stored in said storage unit but said web-specifying information detected from said reply information is different from said web-specifying information stored in said storage unit.

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9. The server according to claim 8, characterized in that said storage unit comprises a data-declaration part to be used in said

series of the processings as work areas for respective setting items of member variables and a data-storage part for storing data included in said reply information in said series of the processings for the respective setting items,

5 and said controller:

 discriminates, when a data entry form for having said client to input the data is included in said web information, a kind of a setting item of the input data to be inputted in said data entry form by said data-declaration part and stores the kind of the setting item of the
10 input data into said storage unit together with said client-specifying information, said web-specifying information and said processing information in said information-storing processing at the time when the web information is sent to said client; and

 stores, when the client-specifying information and the
15 web-specifying information detected from said reply information are identical with said client-specifying information and said web-specifying information stored in said storage unit, respectively, and the kind of the setting item of the input data detected from said reply information is identical with the kind of the setting item of the
20 input data stored in said storage unit, said detected input data into said data-storage part for the respective setting items in said service-executing processing.

10. The server according to claim 8, characterized in that, when a
25 plurality of said data entry forms are included in said web information and when the kinds of the setting item of the input data to be inputted according to said data entry form overlap, said

controller:

executes identifier-adding processing for adding an identifier for carrying out identification of the input data in which the kinds of the setting item overlap to every said data entry form and including the data entry forms in said web information, and at the same time, associates the kinds of the setting item of the input data inputted by said data entry forms with said identifiers and stores the kinds of the setting items into said storage unit in said information-storing processing; and

discriminates, when the client-specifying information and the web-specifying information detected from said reply information are identical with said client-specifying information and said web-specifying information stored in said storage unit, respectively, and the kinds of the setting item of said input data detected from said reply information and the kinds of the setting item stored in said storage unit correspond at every identical identifier, the setting items of said detected input data based on the identifiers stored in said storage unit and stores them into said data-storage part for the respective setting items in said service-executing processing.